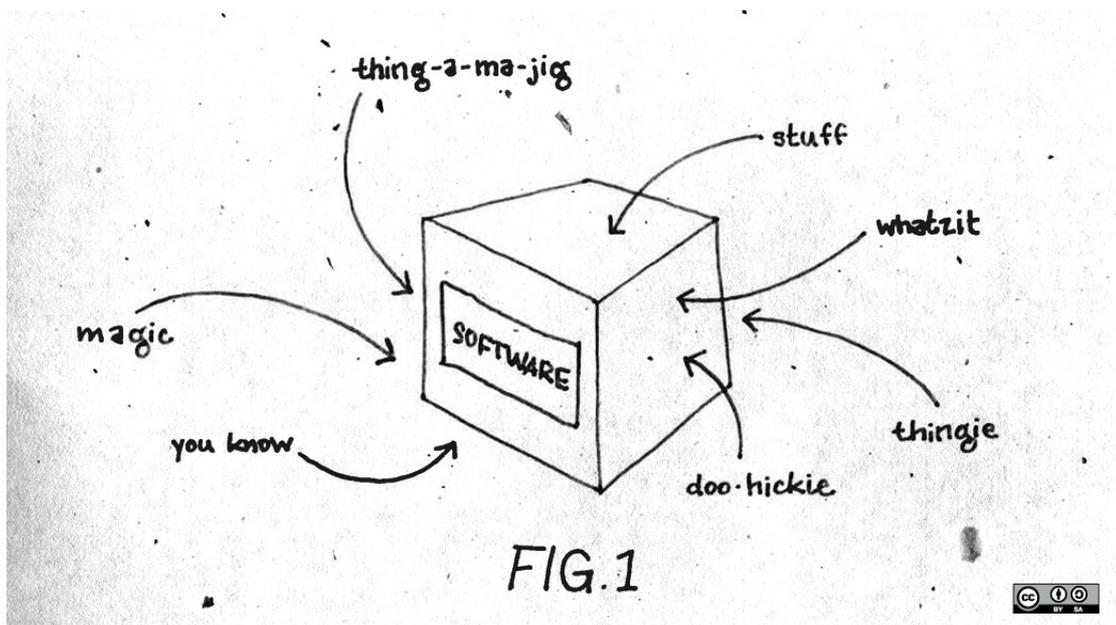


Openforum Academy

Patent non-aggression pacts: a way forward for technological innovation?



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Round Table Report:
Patent non-aggression pacts: a way forward for technological innovation?
19 February 2014, Silken Berlaymont Hotel, Brussels

Speakers

Mirko Boehm - *European representative of the Open Invention Network.*

Carlo Piana - *Independent lawyer specialized in IT law.*

Clara Neppel - *European Patent Office examiner in the field of Computer-Implemented Inventions.*

Moderator: Graham Taylor, CEO of OpenForum Europe.

Rapporteur: Dr. Efthymios Altsitsiadis, Research Expert KU Leuven -
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Foreword

Patents have proven useful in protecting innovation by ensuring fair revenue to inventors in exchange for public disclosure. The current system, however, has led to a number of abuses in the field of technology which are harming innovation in a significant manner. So-called 'patent trolls', companies whose business model consists in buying up patents with the sole aim of taking anyone who infringes them to court, have grown exponentially, particularly in the US where they are increasingly seen as a major problem. At the same time technology giants are engaged in massive legal battles, spanning over the courts of multiple countries, as exemplified by the ongoing Apple versus Samsung cases. The 'patent thicket' of complex technologies such as smartphones, which can be covered by hundreds of individual patents, makes it extremely costly and lengthy to settle any legal dispute. Not only does this hold up public resources in expensive lawsuits, but it often also represents a significant barrier to smaller innovators who may not have the capacity to cover these legal costs.

In the absence of a global reform of the patent system, some industry-lead initiatives have tried to mitigate these issues. One example is patent non-aggression pacts (also known as defensive patent pools), which are used to 'shield' its signatories against the aggressive use of patents.

Introduction

Mr. Graham Taylor opened the round table by stressing the mission of the Openforum Europe in support of an open ICT market and its commitment in campaigning against lock-in in all of its aspects within the ICT field. He also introduced the Openforum Academy, a think tank of expert fellows from across the globe set to bring innovative intellectual thinking into ongoing and emerging topics of debate around openness in the ICT market.

“When one talks about patents and open source in the same sentence it is like oil and water”, said Mr. Taylor, emphasizing how incompatible patents and open source software are seen as well as the need to understand the problems that are implied. This need is becoming increasingly important as the legal battles fought over patents are constantly intensifying. Suffice it to say that Apple and Google are for the first time spending more on litigation than on Research and Development. And this issue does not only apply to large corporations that make the everyday headlines but to smaller companies as well who often become victims of patent trolling when they become large enough to be lucrative targets for patent infringement lawsuits. Mr. Taylor provided an actual example of patent trolling based on the experience of a European SME developing open source software. The “trolled” companies do not have the necessary resources to pursue the proof of their innocence and therefore end up paying off the suing firm and as a result their development is hindered significantly.

Mr. Taylor denoted the discussion’s focus on the practical side of what should be done and especially within the context of Europe.

Mr. Mirko Boehm introduced the Open Invention Network as a non-aggression pact between companies and specifically within the field of the Linux system definition. He noted that patent trolls or non-practicing entities as well as practicing entities are all part of the existing patent system and in fact can be characterized as “the two sides of the same medal”. That is because patents are simply tools that help restrain the competition by creating a temporary legal monopoly. The patent holder has the right to choose how the patent will be used; whether to license it for free, to request licensing fees himself, or to delegate the collection of licensing fees to a third party. Because of that, it will be difficult to impose regulation to deal with non-practising entities that will not affect practicing entities as well. Therefore, one should “blame the game and not the players” and it is the “game” that needs to be changed.

Non Aggression Pacts can be divided into 3 distinct categories:

- a) Unilateral assertions of non-aggression by an individual patent holder: In this case the patent holder declares to use it's own patents solely for defensive purposes. The main beneficiaries are the entities in charge of the initiative.
- b) Bilateral agreements, where two patent holding entities enter into an agreement of mutual non-aggression: Such agreements do not reduce the risk of litigation for other parties in any way.
- c) Multilateral agreements, where multiple entities enter into an agreement of mutual non-aggression. The Open Invention Network represents such a collaborative effort for a specific field of use, the Open Source space covered by its Linux System Definition.

Non-aggression pacts are typically industry initiatives to mitigate risks associated with the patent system as it is. However some are meant to create a competitive advantage against competitors, where others are meant to increase freedom to operate for innovators. That raise important concerns: Are there circumstances under which they should be regulated and if so how? Especially mutual agreements may result in a dominant market position that can be detrimental to competition. Cooperation is a common strategy of market players, and it is usually assumed that it should only be regulated if it reduces competition at the cost of consumers.

Mr. Boehm pointed out that most concerns are raised from the bilateral type of non-aggression pacts because they are typically established by incumbent companies with strong market positions and may indeed hamper technological innovation by prohibiting competition. Pacts, however, with voluntary and open participation, along with transparently and well defined entry conditions and costs can be indeed beneficial to technological innovation.

Ms. Clara Neppel argued that a patent can be seen as a social contract between an inventor and the public. The inventor obtains an exclusive right for a limited time and a limited territory,. The public benefits from the disclosure of the invention, which otherwise would remain secret. This social contract still works quite well; however, the use of patents in some fields is not always optimal, as demonstrated by the case of patent trolls. Since the EPO's core competencies lie in examining patent applications and not in the regulation on the usage of patents, she talked about the role of the current patent system for the needs of the current discussion.

Ms. Neppel explained that the patent system should include three distinct dimensions: the quality filter, transparency and harmonization. Among

these three the quality filter is considered the most essential as it ensures that only valid and genuine patents are generated from the system. Overall, the EPO grants less than 50% of all patent applications, in the field of computer implemented inventions even only 35%. Third parties can always file prior art or observations online and also anonymously if wanted, or oppose patents within 9 months. She expressed her view that the EPO already includes new forms of prior art for priority searches, such as standards documentation or open source material, and that this round table can be an opportunity to identify new ways that can help to further improve the existing quality standards.

Transparency is important; everybody has to have the chance to understand what kind of IP is involved in a given technical field and territory. That is the reason why the EPO provides online patent information free of charge, including legal status. She noted that it is of equal importance to be able to distinguish between a granted patent and a patent applied for. Finally the harmonization issue is also very important due to the diversity of existing practices at a global scale. The examination proceedings leading to the grant of a patent are harmonised already in Europe. Efforts are made now towards harmonizing the rest of the process as well. The common classification system with other patent offices is given as an example. A global patent as such does not exist, since intellectual property is a fundamentally regional issue. It is important, however, to optimize the usability of the patent system, both for applicants and society in general.

Ms. Neppel concluded her speech stating that society is steadily driven to a knowledge based economy. If the IP is the currency then the role of the patent system is to reinforce this currency so as it can be used properly in the future.

Mr. Carlo Piana expressed his disagreement with regard to IP being the currency of the information society. He argued that even though certain IP rights can prove beneficial for companies operating in a digital economy the current overall IP narrative towards protection is too strong. Mr. Piana recognized the patents as the most problematic area: “They are a 19th century solution to a 19th century problem”. He stressed that if we were able to get rid of software patents many issues would be resolved as many of the problems in the IT industry are generated from the fact that software is patentable. Software patents are too many, too cheap and create an asymmetry which results in an easily exploitable system. Therefore, non aggression pledges are essentially an intermediary solution to a bigger long term problem.

Mr. Piana agreed with the classification of the different non-aggression agreements as proposed by Mr. Boehm. He further explained that unilateral non-aggression pacts can prove beneficial but could be problematic from a legal point of view, depending on the applicability of their founding legal theory, which may vary from jurisdiction to jurisdiction, thus leading to a certain degree of uncertainty. He pointed out some of the problems that accompany the attempt to retract from the maximum protection allowed within such pledges.

Pacts such as the Open Invention Network can prove beneficial as they serve as a form of cross licensing where several licenses are pooled together. On the contrary closed agreements, whether bilateral or multilateral, are not the right way to reduce the problems of the patent system as they may be beneficial to the members of the pool but only in the expense of fencing off competition. Non aggression pacts must be open for participation even to companies that do not have any patents in their possession. This is the way to promote and restore freedom of enterprise. In addition, these pacts have to be more solid, more legally robust and of minimal cost to enter.

Mr. Piana stated that raising the quality of the patents or abolishing all the patent trolls and non practicing entities is not the ultimate solution to all problems. Instead he placed the focus on practicing entities which utilize patents in an anticompetitive way, most of the time in combination with them being embedded into standards. Public policy, therefore, should give emphasis on preventing the abuse of patents and standards and especially when SMEs are involved as they are the entities most susceptible to suffer from patent holdups.

Finally, Mr. Piana talked about the incompatibility that exists between patents and Free (open source) Software. He explained that open standards, a clear IPR policy by standard setting bodies, and patented software at least distributed with a licence that conveys a title licence to both receivers and downstream firms, are all prerequisites for openness in software patents, short of a total prohibition of patent protection in software and a general revision of the patent system in all technology fields.

Mr. Taylor pointed out, that the IT market is constantly moving farther and farther away from the telecoms practice. Specifically, the IT market has shifted from product to service led businesses and solutions.

Discussion

Disclaimer: These comments were taken from the general part of the meeting and do not necessarily represent any of the speakers' views or those of their organizations. The discussion took place under Chatham House Rule and therefore names and affiliations of participants are not reported.

Comment: A political solution is possible but we have to work on it. Most of the problems mentioned already are all so well known that they might have come up in a similar round table 10 years ago. The one truly new thing that was mentioned concerns the computer implemented business methods for which the grant rate in Europe is around 8%. The member of the audience urged everyone to consider the political solutions as well, in addition to the business solutions.

- **Question:** Should we be aligning the European thinking to the changing market or are we quite happy to follow as it has been? Are bilateral agreements actually breaking the competition?

The quality of software patents is not always optimal; some countries do better than others. Non aggression pacts do not always work against patent assertion entities. Nowadays practicing entities are increasingly transferring their IP portfolio to patent assertion entities that then set out to attack their rival companies. The most immediate problem is how to deal with these patent assertion entities and especially privateers that are unions of competitors who have banded together in order to create patent assertion entities. The second thing that should be done apart from improving the quality of the patents is to take the sharp edges off patents. The example of the EBay case law shows IPR injunction practices in the US. In Europe there is still no such practice except maybe to a smaller degree in the U.K. and Netherlands. In Germany an injunction is issued automatically upon an infringement finding. This is going to pose a grave problem when the unified patent system is established. The focus should be both on the long term solutions such as the improvement of the patent software quality and on the short term solutions such as the non aggression pacts. There is also the need to deal with enforcement practices and especially competition damaging practices such as patent assertion entities and privateers.

- **Question:** What is there to be done? And who should initiate it: the EPO or the legislator?

There is still a chance for the EU legislators to introduce proper principles in the unitary patent. In spite of a legislative gap, courts can always

interpret a law in light of such principles. This would not be an ideal but still a viable solution. Otherwise the prospect of innovation will suffer significant damage in the European region. Finally, the problem of patent trolls and privateer companies can be addressed also through competition legislation.

Comment: Trading property is not necessarily bad. The problem lies in the usage of patents, if not in SW patents themselves. An additional issue concerning the trading of patents is the fact that it is often situated below the European Commission merger control threshold. Carrying out the assessment at the moment of the transaction would enable the problem to be nipped in the bud before it got out of hand.

Comment: Bilateral agreements are at best defensive, employed as a means to avoid aggression. They actually do not promote openness and at the worst case scenario they serve as way for large companies to band together and get rid of the disruptors. The only way for SMEs to grow above a certain dimensional threshold is to not step in the turf of large companies by treading in unexplored business terrain as in the example of Twitter. Otherwise the only strategy for fast-growing startups is to exit the market by selling to the big ones.

In response: A director has the responsibility to maximize the value of the company for the benefit of its shareholders. In this sense the director is obliged to use any allowable means necessary to fulfill his duty including the capitalization on the value of patents. This environment, however, is definitely preventing SMEs from maximizing their development which directly implies that the system is broken, something particularly true for the US. There are similar examples within Europe; a specific example was given about an innovative UK company in the market of IT. In particular, the company had developed several competitive advantages but in the end the venture was halted by patent related problems.

- **Question:** Do we have patent trolls operating in the European market? Can Europe do something about these trolls or is it just natural progression?

There are definitely patent trolls in Europe. Maybe their number is fewer than in the US as the EU is less effective in enforcing patent rights without a pan-European infringement mitigation system. However, they operate in silence avoiding to be noticed.

Trolls and non practicing entities are paradoxically not the biggest and only problem. Patent trolls focus on making money and not disrupting their victims. In fact, they wish their victim to be successful in order to extract

more money in the future. Therefore one can say that they are in a sort of “virus – host” relationship where the virus is aggressive but still not aggressive enough to kill the host. However, this description applies only to one type of patent trolls. Another type of patent trolls has a primary focus on disrupting other companies while preventing them from being effective competitors. This poses a substantial problem to technological innovation. A technology that can be used freely by everyone without any fear of patents is the only way to solve this problem.

In a non-representative survey, it turned out that there is no real objection within the IT community against granting patent rights to ground breaking inventions. However, most innovations in software are small, incremental steps that experts in the field do not consider worth of patent protection. Most software patent applications relate to either an obvious solution to a problem or a combination of things that were previously done in a simpler manner. This shows once again the importance of the quality filter.

- **Question:** Should we think of patents as they are nowadays or rather as they should be ideally?

Patents should foster innovation and motivate inventors. They are meant to transform the intangible intellectual property into a tangible asset that can be traded and should be given only to ground breaking inventions. However, this does not correspond to the current situation. There are very few ground breaking inventions but an overabundance of patents.

In response: Another participant highlighted that ground breaking inventions tend to be rare in all fields including software. In Europe a patent is granted to a computer program if it offers a technical solution to a technical problem, which could be the case for instance in the area of embedded systems. Therefore, even in the case of a novel algorithm that has not been used before the focus of the patent examination process will remain on whether the algorithm under question offers a technical solution to a technical problem. Even though examples exist of SMEs not being able to further a certain development because of existing patent rights, they still have the option to obtain a license or to develop an alternative solution. There are also several counter examples where SMEs were able to get the necessary funding, develop or spin-off from a university as a result of protecting their inventions through patents. There are also examples of big technology companies that are actively promoting open source software for platform solutions while still actively applying for patents for their add-on inventions.

In response: A participant from such a technology company stressed that they would prefer to abolish the patent system. However, under the

current system it would be a strategic mistake to not apply for patents and build a patent portfolio; a purely defensive stance.

Building a new revenue stream on patent licensing is a practice much less rewarding than generally understood. Instead, patent licensing is used as an intermediary step to “make peace” with larger corporations enabling the uninterrupted development of the company and keeping the competition outside of the court and in the market.

The purpose of the Open Invention Network (OIN) scheme was explained. OIN is a patent non-aggression network that freely licenses its own pool of patents. Becoming a licensee is free of charge, as long as the joining entity pledges non-aggression within the Linux system definition of OIN. No revenue is generated from the licensees that join the network. The network accepts any entity that is willing to pledge non-aggression within the specific system definition of the network. The participant company benefits from the different patents that exist in the pool as well as from the non aggression pledges of all other licensees. Additional activities of the network include providing help with defensive publications.

Question: Does OIN perform crowd sourcing for prior art?

There have been multiple attempts of crowd-sourcing prior art through several channels, but so far they did not result in strong submissions. The prerequisites of collaborative production are voluntary participation, small contributions and intrinsic motivation and it appears that there is a lack of the latter. Many software developers are interested in programming and contributing to open source but this alone does not suffice for collaborative production.

- **Question:** Is there any possibility that the activities of OIN can be expanded as to cover different areas? Do we need different “OINs” for each particular area?

As organizations like OIN grow larger, due to network effects it becomes apparent that there is only room for one in a certain field of use. It was the particularities of the software field that allowed for the creation of OIN. Therefore a similar approach may or may not be suitable for other areas or industries. However the concept of accessing a free license pool in exchange for a non-aggression pledge should be viable in almost every field of use.

Comment: Linux is a very limited part of the market.

The Linux System Definition applied by OIN is a collection of software source code packages that are essential to a Linux installation. They are

all under Open Source licenses and often used on other platforms as well. In that, OIN covers a large share of general Open Source software.

- **Question:** A very important issue regards the transparency aspect and the consequent lack of information. What can be done or has already been done to improve transparency?

The EPO's patent information services make some 88 million patent documents readily available via its online patent search services. This is further supplemented by patent family information and legal status information. This is important as, once relevant patent applications and specifications have been retrieved, it is important to know in which countries family members have been filed, and their legal status (active, granted, no longer active, refused etc.) It is very important to have meta-data on what is applied for in a certain technological field. The meta-data that are employed by the patent system are available in the form of the classification system for all potential users. In certain sensitive fields, such as clean energy or smart grids, a dedicated classification scheme has been set up by the EPO to support the access to and transparency around these technologies.

- **Question:** Do you think the current search system (implemented by EPO) is clear enough to enable SMEs to conduct an IP search without having to pay for such a service? If not, is there something that can be done to make such a possibility viable?

The current system is indeed good enough. However, some experience might indeed be useful before utilizing the full potential of the system. That is due to the complex nature of the patent jargon that is sometimes difficult to understand. A solution to this is narrowing down the search to a specific technical field by using the aforementioned patent classification scheme. Online training on how to search patent information is available free of charge on the website of the EPO. A SME is able to utilize the system on an acceptable extent whereas the help of an expert is recommended to make the situation on possible conflicting patent rights absolutely clear.

- **Question:** The patent system involves disclosing your invention in exchange for protection. But in practice what is the value of this disclosure? How many software developers look for a patent when they face a problem in their development?

The time required for publishing a patent is actually 18 months from the date of filing. This is one of the underlying principles of the entire patent system. The importance of the disclosure is illustrated by the fact that

more than 80% of the information in patents cannot be found anywhere else.

Another discussant points out that no known software developer look at the patent system as a source of knowledge as to make better software.

- **Question:** The problem then is why don't we look for solutions? Is patent documentation valuable?

A participant highlighted that software patents do not contain source code but only an abstract description of a technical solution. However, one of the patentability requirements is that the disclosure is sufficiently clear in order to be carried out by a person skilled in the art. Otherwise, the application is refused. Another problem is the 20 year patent period. It is highly unlikely that a software patent can offer potentially any benefit to the society after such a long period of time. On the other hand, it is also unlikely that the patent owner pays the annual renewal fees to maintain the exclusive right for such a long time, if the invention becomes obsolete. Actually, in most cases patents are not maintained over the whole period, and the underlying inventions becoming public good much earlier than 20 years.

- **Question:** Do SMEs have the same access to protection as larger companies?

An example was provided to demonstrate that this is not the case as transaction costs when dealing with patents can be very high. Higher transaction costs lead to higher market concentration and that translates to lower competition. As a result large companies tend to view software patents favorably. To the contrary, SMEs and especially start-ups tend to avoid software patents as they are unable to reap the benefits of the system.

Comment: An additional problem appears when the ownership of the patent is dispersed. Dispersed ownership and patent assertion entities create a self-destructive patent system as the individual patent owners do not restrain themselves sufficiently in order to keep the total royalty stack at an efficient level.

A participant linked the comment to the hold-up problem. This happens when a company has several patent disputes with one or even several patent assertion entities. The more patents are settled, the more susceptible the company becomes to patent trolls. The final settlement can potentially destroy the defending company as it has already invested too much funds to fight the patent troll.

A participant brought up the issue of interoperability and the need to create a platform with multiple standards in different areas.

One of the key elements for the synergy between standards and patents is a high patent quality which provides legal certainty and prevents patent thickets in these areas. For example, the EPO has invested significantly in incorporating standards-related documentation into its internal databases and utilising it as an integral part of the patent-granting process. In the ICT area, standards-related documentation has proved essential. In fact, around 35% of prior art citations in some standards-intensive areas are standards-related documents.

Comment: Development in the telecoms industry can prove very expensive due to the immense amount of existing patents. The same does not apply for the software field where development is more dispersed.

The IT and telecoms technology areas are actually converging from a technological perspective. However, it is not the convergence that is of importance. The focal point should be on the different business models adopted by each industry.

Comment: An open standard is supposed to be implementable in free software and open source. For this to happen, however, essential patents for this standard need to be licensed for free. The previous statement translates into non-discriminatory, unilateral and free licensing.

Question: What is the one thing that is viable or can be done now in Europe in order to improve the current situation on patents?

The following examples represent personal opinions expressed by some participants:

- ❖ One thing that could be done is a better implementation of the European Patent Convention with respect to Art. 52.2 c) of EPC.
- ❖ Another thing could be a better definition of open standards in the European Interoperability Framework (EIF) Version 2.
- ❖ A viable option would also be the effective implementation of the European Unitary Patent in a way that will take away the fear from the users of the patent system.
- ❖ A comprehensive solution is to require software patents to include an implementation documentation that will allow reproducibility. The aim is to verify the functionality of the patent and better distinguish between just ideas and actual implementations.

Final Remarks: Mr. Taylor stressed the substantial value of the current round table for future discussions and thanked the panel for their contributions.

Note

OpenForum Academy welcomes financial support for its Round Table events but only if independence of the discussion itself and the follow up White Paper is fully maintained.

The Open Invention Network was a supporter of this Round Table.

Short Speaker Bios



Mirko Boehm - Mirko Boehm is the director for the Linux System definition at Open Invention Network (OIN), an intellectual property company that was formed to promote Open Source by using patents to create a collaborative ecosystem. He is a member of the German team of the Free Software Foundation Europe, and a visiting lecturer on Open Source and intellectual property at the Technical University of Berlin. Previously, he has been a long term board member and core developer at the KDE project, one of the largest Open Source communities world-wide.



Clara Neppel - Dr. Clara Neppel works as an examiner in the field of computer implemented inventions (CII) at the European Patent Office. Ms. Neppel is also actively involved in a number of public policy issues, such as standards and patents or innovation and climate change. She co-authored publications both in the field of patentability of CII as well as possible future scenarios of the patent system. Before joining the Office she worked for many years in research, in the area of parallel database optimisation, and in industry, in the field of archiving solutions. She holds a PhD in computer science from the Technische Universität München.



Carlo Piana - Carlo Piana is a lawyer by training and a Free Software advocate. A qualified attorney in Italy, he has been practicing IT law since 1995, focusing his practice on software, technology, standardization, data protection and digital liberties in general, and serves as external General Counsel to the Free Software Foundation Europe (FSFE). Piana, is a member of the Editorial Committee of the International Free and Open Source Software Law Review (IFOSS L. rev.) and serves as president of the board of directors of the Protocol Freedom Information Foundation. In 2008 he established a free lance consulting practice on IT law, from where he leads a small group of IT lawyers named Array.